

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATADATE 10-1-66

Operator <u>El Paso Natural Gas Company</u>		Lease <u>Winters, N.M.</u>	
Location <u>10012, N. 100, E-07-11, H-1-1</u>		County <u>San Juan</u>	State <u>New Mexico</u>
Formation <u>San Juan</u>		Pool <u>San Juan</u>	
Casing: Diameter <u>4.5</u>	Set At: Feet <u>7000</u>	Tubing: Diameter <u>2.375</u>	Set At: Feet <u>60</u>
Pay Zone: From <u>50</u>	To <u>600</u>	Total Depth: <u>7000</u>	Shut In <u>10-1-66</u>
Stimulation Method <u>Acid Fracturing</u>		Flow Through Casing	Flow Through Tubing

Choke Size, inches <u>1.750</u>		Choke Constant: C <u>12.365</u>	
Shut-In Pressure, Casing, PSIG <u>1930</u>	+ 12 = PSIA <u>1951</u>	Days Shut-in <u>7</u>	Shut-In Pressure, Tubing PSIG <u>1940</u>
Flowing Pressure: P PSIG <u>395</u>	+ 12 = PSIA <u>397</u>	Working Pressure: P _w PSIG <u>962</u>	+ 12 = PSIA <u>974</u>
Temperature: T = <u>80</u> °F	F _t = <u>.9813</u>	F _{pv} (From Tables) <u>1.040</u>	Gravity <u>.660</u> F _g = <u>.9325</u>

$$\text{CHOKE VOLUME} = Q = C \times P_t \times F_t \times F_g \times F_{pv}$$

$$Q = (12.365)(397)(.9813)(.9325)(1.040) = \underline{4672} \text{ MCF/D}$$

$$\text{OPEN FLOW} = A_{of} = Q \left(\frac{P_c^2}{P_c^2 - P_w^2} \right)^n$$

$$A_{of} = \left(\frac{2610304}{2661626} \right)^n = (4672)(1.3315)^{.75} = (4672)(1.2395)$$

NOTE: The well produced a heavy fog of water and hydrocarbons throughout the test.

$$A_{of} = \underline{5791} \text{ MCF/D}$$

TESTED BY R. E. Kendrick
 OBSERVED
 WITNESSED BY R. E. Kendrick
 Calculated by R. E. Kendrick

